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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/858,402	05/16/2001	Khaled A. Al-Zoubi	1266-001	2460
23485	7590	03/25/2004	EXAMINER	
JINAN GLASGOW P O BOX 28539 RALEIGH, NC 276118539			SIMONE, CATHERINE A	
			ART UNIT	PAPER NUMBER
			1772	

DATE MAILED: 03/25/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/858,402

Applicant(s)

AL-ZOUBI ET AL.

Examiner

Catherine Simone

Art Unit

1772

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 16 September 2003.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-15 is/are pending in the application.
- 4a) Of the above claim(s) 15 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-14 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 9/16/03.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 9/16/03 has been entered.

Withdrawn Rejections

2. The 35 U.S.C. 112 rejections of claims 1-14 of record in Paper #3, Pages 3-4, Paragraph #3 has been withdrawn due to the Applicant's amendment filed 9/16/03.

3. The 35 U.S.C. 102 rejection of claims 1-14 as anticipated by Fournier of record in Paper #3, Pages 4-5, Paragraph #5 has been withdrawn due to the Applicant's amendment filed 9/16/03.

Claim Objections

4. Claim 10 is objected to under 37 CFR 1.75(c), as being of improper dependent form for failing to further limit the subject matter of a previous claim. Applicant is required to cancel the claim(s), or amend the claim(s) to place the claim(s) in proper dependent form, or rewrite the claim(s) in independent form. Claim 10 reads the same as claim 9 and therefore fails to further limit claim 1.

Claim Rejections - 35 USC § 102

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

6. **Claims 1, 3, 4, 7, 11, and 12** are rejected under 35 U.S.C. 102(b) as being anticipated by Landers (4,779,389).

Landers discloses an integrated, monopole reinforcement sleeve system for reinforcing monopoles in areas of stress, comprising at least one pair of complementary hemi-sleeves (Fig. 2, #32 and #33; also see col. 6, lines 21-24) attachable to a monopole (Fig. 2, #21; also see col. 6, lines 28-35) to reinforce the monopole at predetermined locations that are overstressed without adding new lateral stress to the monopole at the predetermined locations; and a non-slip filler (see col. 9, lines 28-32); wherein the non-slip filler is inserted between the at least one pair of complementary hemi-sleeves and the monopole (see col. 9, lines 28-32) at the predetermined locations that are overstressed; and the at least one pair of complementary hemi-sleeves are tightened around the monopole and fixed thereto by fasteners (see col. 6, lines 31-34), to form an integral reinforcing sleeve system for existing monopoles to reinforce the predetermined overstressed locations and to reinforce the monopole against lateral forces acting thereon; thereby providing integrated monopole reinforcement. Regarding **claim 3**, note the at least one pair of complementary hemi-sleeves (Fig. 2, #32 and #33) are shaped to approximate the shape of the monopole surface (see col. 6, lines 32-34). Regarding **claim 4**, note the at least one pair of complementary hemi-sleeves have a circular shape (Fig. 2, #32 and #33). Regarding **claim 7**,

note the at least one pair of complementary hemi-sleeves (Figs. 1 and 2, #32 and #33) are located at a predetermined, select position on the monopole (Figs. 1 and 2, #21) for optimal reinforcement of the monopole against lateral stresses, in particular due to the appurtenances attached to the monopole. Regarding **claim 11**, note the non-slip filler is a foam (see col. 9, lines 29-32). Regarding **claim 12**, note the non-slip filler is combined with the at least one pair of complementary hemi-sleeves and attached to a monopole in a snug-fitting manner without gaps between the at least one pair of complementary hemi-sleeves and the monopole (see col. 9, lines 28-32).

7. **Claims 1, 3, 4, 7, 11 and 12** are rejected under 35 U.S.C. 102(b) as being anticipated by Kinnan (4,697,649).

Kinnan discloses an integrated, monopole reinforcement sleeve system for reinforcing monopoles in areas of stress, comprising at least one pair of complementary hemi-sleeves (Figs. 2-5, #32; see col. 8, lines 19-22) attachable to a monopole (Figs. 3-5, #20) to reinforce the monopole at predetermined locations that are overstressed without adding new lateral stress to the monopole at the predetermined locations; and a non-slip filler (Fig. 10, #230; also see col. 14, lines 13-15); wherein the non-slip filler (fig. 10, #230) is inserted between the at least one pair of complementary hemi-sleeves (Fig. 10, #32) and the monopole (Fig. 10, #20) at the predetermined locations that are overstressed; and the at least one pair of complementary hemi-sleeves are tightened around the monopole and fixed thereto by fasteners (see col. 8, lines 26-30), to form an integral reinforcing sleeve system for existing monopoles to reinforce the predetermined overstressed locations and to reinforce the monopole against lateral forces acting thereon; thereby providing integrated monopole reinforcement. Regarding **claim 3**, note the at

least one pair of complementary hemi-sleeves (Fig. 4, #32) are shaped to approximate the shape of the monopole surface (Fig. 4, #20). Regarding **claim 4**, note the at least one pair of complementary hemi-sleeves have a circular shape (Fig. 5, #32). Regarding **claim 7**, note the at least one pair of complementary hemi-sleeves (Figs. 3 and 4, #32) are located at a predetermined, select position on the monopole (Figs. 3 and 4, #20) for optimal reinforcement of the monopole against lateral stresses, in particular due to the appurtenances attached to the monopole.

Regarding **claim 11**, note the non-slip filler is a polymer (see col. 14, line 21). Regarding **claim 12**, note the non-slip filler (Fig. 10, #230) is combined with the at least one pair of complementary hemi-sleeves (Fig. 10, #32) and attached to a monopole (Fig. 10, #20) in a snug-fitting manner without gaps between the at least one pair of complementary hemi-sleeves (Fig. 10, #32) and the monopole (Fig. 10, #20).

8. **Claims 1-4, 7 and 9-12** are rejected under 35 U.S.C. 102(b) as being anticipated by Phillips (4,702,057).

Phillips discloses an integrated, monopole reinforcement sleeve system for reinforcing monopoles in areas of stress, comprising at least one pair of complementary hemi-sleeves (Fig. 2, #5) attachable to a monopole (Fig. 2, #1) to reinforce the monopole at predetermined locations that are overstressed without adding new lateral stress to the monopole at the predetermined locations; and a non-slip filler (Fig. 2, #7); wherein the non-slip filler (Fig. 2, #7) is inserted between the at least one pair of complementary hemi-sleeves (Fig. 2, #5) and the monopole (Fig. 2, #1) at the predetermined locations that are overstressed; and the at least one pair of complementary hemi-sleeves are tightened around the monopole and fixed thereto by fasteners (see col. 3, lines 65-68 and col. 4, lines 1-6), to form an integral reinforcing sleeve system for

existing monopoles to reinforce the predetermined overstressed locations and to reinforce the monopole against lateral forces acting thereon; thereby providing integrated monopole reinforcement. Regarding **claim 2**, note the at least one pair of complementary hemi-sleeves (Fig. 2, #5) include corresponding flanges (Fig. 2, #6) for fastening the at least one pair of complementary hemi-sleeves to the predetermined overstressed locations of the monopole. Regarding **claim 3**, note the at least one pair of complementary hemi-sleeves (Fig. 2, #5) are shaped to approximate the shape of the monopole surface (Fig. 2, #1). Regarding **claim 4**, note the at least one pair of complementary hemi-sleeves have a circular shape (Fig. 2, #5). Regarding **claim 7**, note the at least one pair of complementary hemi-sleeves (Figs. 2 and 4, #5) are located at a predetermined, select position on the monopole (Figs. 2 and 4, #1) for optimal reinforcement of the monopole against lateral stresses, in particular due to the appurtenances attached to the monopole. Regarding **claims 9 and 10**, note the non-slip filler is an elastic polymer (see col. 5, line 34). Regarding **claim 11**, note the non-slip filler is a foam (see col. 5, line 34). Regarding **claim 12**, note the non-slip filler (Fig. 2, #7) is combined with the at least one pair of complementary hemi-sleeves (Fig. 2, #5) and attached to a monopole (Fig. 2, #1) in a snug-fitting manner without gaps between the at least one pair of complementary hemi-sleeves and the monopole (see col. 4, lines 15-21).

Claim Rejections - 35 USC § 103

9. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person

having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

10. **Claims 5 and 6** are rejected under 35 U.S.C. 103(a) as being unpatentable over Landers (4,779,389) and Kinnan (4,697,649) and Phillips (4,702,057).

Landers, Kinnan and Phillips each disclose an integrated, monopole reinforcement sleeve system for reinforcing monopoles in areas of stress, comprising at least one pair of complementary hemi-sleeves attachable to a monopole to reinforce the monopole at predetermined locations that are overstressed without adding new lateral stress to the monopole at the predetermined locations; and a non-slip filler; wherein the non-slip filler is inserted between the at least one pair of complementary hemi-sleeves and the monopole at the predetermined locations that are overstressed; and the at least one pair of complementary hemi-sleeves are tightened around the monopole and fixed thereto by fasteners, to form an integral reinforcing sleeve system for existing monopoles to reinforce the predetermined overstressed locations and to reinforce the monopole against lateral forces acting thereon; thereby providing integrated monopole reinforcement. However, Landers, Kinnan and Phillips each fails to disclose the at least one pair of complementary hemi-sleeves having a non-circular shape, such as polygonal shape.

Normally, it is to be expected that a change in shape of the at least one pair of complementary hemi-sleeves would be an unpatentable modification. Under some circumstances, however, changes such as shape may impart patentability to a product if the particular shape claimed produces a new and unexpected result which is different in kind and not merely in degree from the results of the prior art. *In re Dailey et al*, 149 USPQ 47 CCPA 1966.

Therefore, it would have been obvious to one of ordinary skill in the art at the time the applicant's invention was made to change the shape of the at least one pair of complementary hemi-sleeves in each of Landers, Kinnan and Phillips to be of a polygonal shape. One skilled in the art would have been motivated to do so in order to form an integrated, monopole reinforcement sleeve system, since it has been held that the change in form or shape of the at least one pair of complementary hemi-sleeves would be an unpatentable modification in the absence of showing unexpected results.

11. **Claim 8** is rejected under 35 U.S.C. 103(a) as being unpatentable over Landers (4,779,389) and Kinnan (4,697,649) and Phillips (4,702,057) in view of Ritz (6,453,636).

Landers, Kinnan and Phillips each disclose an integrated, monopole reinforcement sleeve system for reinforcing monopoles in areas of stress, comprising at least one pair of complementary hemi-sleeves attachable to a monopole to reinforce the monopole at predetermined locations that are overstressed without adding new lateral stress to the monopole at the predetermined locations; and a non-slip filler; wherein the non-slip filler is inserted between the at least one pair of complementary hemi-sleeves and the monopole at the predetermined locations that are overstressed; and the at least one pair of complementary hemi-sleeves are tightened around the monopole and fixed thereto by fasteners, to form an integral reinforcing sleeve system for existing monopoles to reinforce the predetermined overstressed locations and to reinforce the monopole against lateral forces acting thereon; thereby providing integrated monopole reinforcement. However, Landers, Kinnan and Phillips each fails to disclose multiple pairs of complementary hemi-sleeves positionable at different locations on the monopole. Ritz teaches that it is old and well-known in the analogous art to have multiple pairs

of complementary hemi-sleeves positionable at different locations on a monopole (see col. 3, lines 16-18 and col. 5, lines 5-13) for the purpose of producing an integrated, monopole reinforcement sleeve system for reinforcing monopoles in areas of stress.

Therefore, it would have been obvious to one of ordinary skill in the art at the time the applicant's invention was made to have provided each of Landers, Kinnan and Phillips with multiple pairs of complementary hemi-sleeves positionable at different locations on a monopole as suggested by Ritz in order to produce an integrated, monopole reinforcement sleeve system for reinforcing monopoles in areas of stress.

12. **Claims 13 and 14** are rejected under 35 U.S.C. 103(a) as being unpatentable over Landers (4,779,389) and Kinnan (4,697,649) and Phillips (4,702,057) in view of Kozikowski (4,543,764).

Landers, Kinnan and Phillips each disclose an integrated, monopole reinforcement sleeve system for reinforcing monopoles in areas of stress, comprising at least one pair of complementary hemi-sleeves attachable to a monopole to reinforce the monopole at predetermined locations that are overstressed without adding new lateral stress to the monopole at the predetermined locations; and a non-slip filler; wherein the non-slip filler is inserted between the at least one pair of complementary hemi-sleeves and the monopole at the predetermined locations that are overstressed; and the at least one pair of complementary hemi-sleeves are tightened around the monopole and fixed thereto by fasteners, to form an integral reinforcing sleeve system for existing monopoles to reinforce the predetermined overstressed locations and to reinforce the monopole against lateral forces acting thereon; thereby providing integrated monopole reinforcement. However, Landers, Kinnan and Phillips each fails to disclose

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a mounting support incorporated into the at least one pair of complementary hemi-sleeves.

Kozikowski teaches that it is old and well-known in the analogous art to have a mounting support, such as mounting brackets (Fig. 2, #34), incorporated into a sleeve attached to a monopole for the purpose producing an integrated, monopole reinforcement sleeve system for reinforcing monopoles in areas of stress.

Therefore, it would have been obvious to one of ordinary skill in the art at the time the applicant's invention was made to have incorporated into the at least one pair of complementary hemi-sleeves in each of Landers, Kinnan and Phillips a mounting support, such as mounting brackets, as suggested by Kozikowski in order to produce an integrated, monopole reinforcement sleeve system for reinforcing monopoles in areas of stress.

Response to Arguments

13. Applicant's arguments with respect to claims 1-14 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

14. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Catherine Simone whose telephone number is (571)272-1501. The examiner can normally be reached on 9:30-6:00.


If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Harold Pyon can be reached on (571) 272-1498. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

CAS

Catherine Simone
Examiner
Art Unit 1772
March 9, 2004


HAROLD PYON
SUPERVISORY PATENT EXAMINER
1772

3/11/04